

Well Name: POKER LAKE UNIT 23 DTD	Well Location: T24S / R30E / SEC 14 / SESE /	County or Parish/State:
Well Number: 178H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2764690

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 12/05/2023	Time Sundry Submitted: 05:49
Date proposed operation will begin: 12/12/2023	

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD (ID 10400078498): SHL, BHL, FTP, LTP, casing and cement changes. SHL: FROM: 455' FSL & 516' FEL of Section 14-T24S-R30E TO: 845' FSL & 518' FEL of Section 14-T24S-R30E BHL: FROM: 200' FNL & 335' FEL of Section 2-T24S-R30E TO: 230' FNL & 330' FEL of Section 2-T24S-R30E FTP: FROM: 100' FSL & 335' FEL of Section 14-T24S-R30E TO: 500' FNL & 330' FEL of Section 23-T24S-R30E LTP: FROM: 330' FNL & 335' FEL of Section 2-T24S-R30E TO: 330' FNL & 330' FEL of Section 2-T24S-R30E Casing and cement changes are listed on the attached drilling plan. Will be using a 4-string casing program. C-102, Drilling Plan, Directional Plan, Casing Spec Sheet and MultiBowl Schematic attached.

NOI Attachments

Procedure Description

- Proprietary_Connections_Performance_Data_6.0000_26.0000_0.4360__P110_RY_20231205174806.pdf
- 4_String_Slimhole_SDT_3301_1_20231205174639.pdf
- Well_Plan_Report____POKER_LAKE_UNIT_23_DTD_178H_20231205174536.pdf
- Drilling_Plan____PLU_23_DTD_178H_20231205174446.pdf
- POKER_LAKE_UNIT_23_DTD_178H_C_102_signed_12_4_2023_20231205174347.pdf

Well Name: POKER LAKE UNIT 23 DTD	Well Location: T24S / R30E / SEC 14 / SESE /	County or Parish/State:
Well Number: 178H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec_14_24S_30E_NMP_Sundry_2764690_Poker_Lake_Unit_23_DTD_Federal_Com_178H_COAs_20231226101814.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: RANELL (RUSTY) KLEIN	Signed on: DEC 05, 2023 05:48 PM
Name: XTO PERMIAN OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 6401 HOLIDAY HILL ROAD BLDG 5	
City: MIDLAND	State: TX
Phone: (432) 620-6700	
Email address: RANELL.KLEIN@EXXONMOBIL.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 12/26/2023
Signature: Chris Walls	

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.5. Lease Serial No. **NMLC068905**

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other2. Name of Operator **XTO PERMIAN OPERATING LLC**3a. Address **6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,** 3b. Phone No. (include area code)
(432) 683-22774. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 14/T24S/R30E/NMP7. If Unit of CA/Agreement, Name and/or No.
NMNM71016X8. Well Name and No. **POKER LAKE UNIT 23 DTD/178H**

9. API Well No.

10. Field and Pool or Exploratory Area
PURPLE SAGE/WOLFCAMP (GAS)11. Country or Parish, State
EDDY/NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD (ID 10400078498): SHL, BHL, FTP, LTP, casing and cement changes.

SHL: FROM: 455' FSL & 516' FEL of Section 14-T24S-R30E TO: 845' FSL & 518' FEL of Section 14-T24S-R30E

BHL: FROM: 200' FNL & 335' FEL of Section 2-T24S-R30E TO: 230' FNL & 330' FEL of Section 2-T24S-R30E

FTP: FROM: 100' FSL & 335' FEL of Section 14-T24S-R30E TO: 500' FNL & 330' FEL of Section 23-T24S-R30E

LTP: FROM: 330' FNL & 335' FEL of Section 2-T24S-R30E TO: 330' FNL & 330' FEL of Section 2-T24S-R30E

Casing and cement changes are listed on the attached drilling plan. Will be using a 4-string casing program.

C-102, Drilling Plan, Directional Plan, Casing Spec Sheet and MultiBowl Schematic attached.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
RANEL (RUSTY) KLEIN / Ph: (432) 620-6700

Title **Regulatory Analyst**

(Electronic Submission)
Signature

Date **12/05/2023**

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title **Petroleum Engineer**

Date **12/26/2023**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office **CARLSBAD**

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SESE / 455 FSL / 516 FEL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.21189 / LONG: -103.844632 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 100 FSL / 335 FEL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.210915 / LONG: -103.84405 (TVD: 11390 feet, MD: 11800 feet)

BHL: LOT 1 / 200 FNL / 335 FEL / TWSP: 24S / RANGE: 30E / SECTION: 2 / LAT: 32.2536 / LONG: -103.844028 (TVD: 11390 feet, MD: 27296 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 23 DTD 178H
LOCATION:	Sec 14-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2764690** on 12/26/2023. Any previous COAs not addressed within the updated COAs still apply.*

COA

H₂S	<input checked="" type="radio"/> No	<input type="radio"/> Yes		
Potash / WIPP	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 825 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of

24 hours in the Potash Area or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required. If these quantities are exceeded / procedure needs to be changed, contact the PE on-call line to discuss further remediation options.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 6311'**
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to tie back at least **500 feet** into previous casing string. Operator should provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - **Eddy County (API No. / US Well No. contains 30-015-#####)**
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, **BLM_NM_CFO_DrillingNotifications@BLM.GOV**
(575) 361-2822
 - **Lea County (API No. / US Well No. contains 30-025-#####)**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170**

Subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

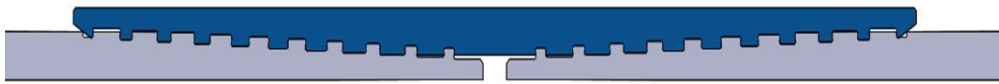
Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.



U. S. Steel Tubular Products

8/27/2021 1:46:58 PM

6.000" 26.00lb/ft (0.436" Wall) P110 RY USS-TALON HTQ™



MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™		[6]
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™		--
Outside Diameter	6.000	6.875	in.	--
Wall Thickness	0.436	--	in.	--
Inside Diameter	5.128	5.128	in.	--
Standard Drift	5.003	5.003	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	26.00	--	lb/ft	--
Plain End Weight	25.93	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™		--
Critical Area	7.621	7.621	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™		--
Minimum Collapse Pressure	13,570	13,570	psi	--
Minimum Internal Yield Pressure	14,010	14,010	psi	--
Minimum Pipe Body Yield Strength	838,000	--	lb	--
Joint Strength	--	838,000	lb	--
Compression Rating	--	838,000	lb	--
Reference Length	--	21,490	ft	[5]
Maximum Uniaxial Bend Rating	--	84.0	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	22,500	ft-lb	[4]
Maximum Make-Up Torque	--	25,500	ft-lb	[4]
Maximum Operating Torque	--	48,900	ft-lb	[4]

UNCONTROLLED

Notes

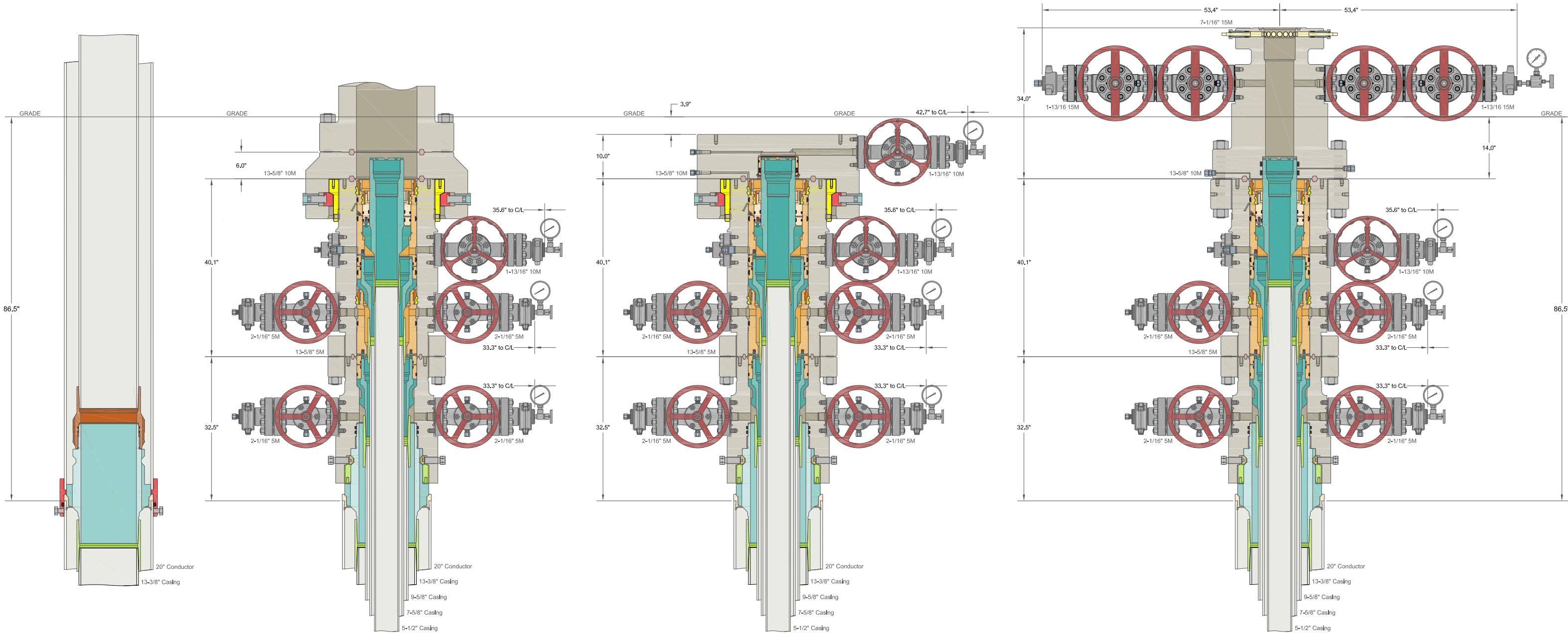
- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- Uniaxial bend rating shown is structural only.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- Coupling must meet minimum mechanical properties of the pipe.

Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com



ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC			
(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And Drilling & Skid Configurations			
XTO ENERGY INC DELAWARE BASIN		DRAWN VJK 31MAR22	
DRAWING NO. SDT-3301		APPRV	

Well Plan Report - POKER LAKE UNIT 23 DTD 178H

Measured Depth: 29287.27 ft

TVD RKB: 12281.00 ft

Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 441494.30 ft

Easting: 651294.60 ft

RKB: 3477.00 ft

Ground Level: 3444.00 ft

North Reference: Grid

Convergence Angle: 0.26 Deg

Site: PLU 23D

Slot: POKER LAKE UNIT 23
DTD 178H

Plan Sections

POKER LAKE UNIT 23 DTD 178H

Measured			TVD			Build	Turn	Dogleg		
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target	
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)		
0.00	0.00	0.00	1.00	-0.00	0.00	0.00	0.00	0.00		
1100.00	0.00	0.00	1101.00	-0.00	0.00	0.00	0.00	0.00		
2670.00	31.40	174.67	2593.58	-417.73	39.01	2.00	0.00	2.00		
5030.53	31.40	174.67	4608.42	-1642.26	153.35	0.00	0.00	0.00		
6600.53	0.00	0.00	6101.00	-2059.99	192.36	-2.00	0.00	2.00		
12064.34	0.00	0.00	11564.80	-2059.99	192.36	0.00	0.00	0.00		
13189.34	90.00	359.77	12281.00	-1343.80	189.50	8.00	0.00	8.00	FTP 7	
29187.26	90.00	359.77	12281.00	14654.00	125.60	0.00	0.00	0.00	LTP 7	
29287.27	90.00	359.77	12281.00	14754.00	125.20	0.00	0.00	0.00	BHL 7	

Position Uncertainty

POKER LAKE UNIT 23 DTD 178H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
----------	-----	----------	---------	----------	-----------	------------	------------	------------	------

Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	101.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	201.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	301.000	1.497	0.000	1.271	0.000	2.326	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	401.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	501.000	2.240	0.000	2.034	0.000	2.375	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	601.000	2.607	0.000	2.405	0.000	2.407	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	701.000	2.971	0.000	2.773	0.000	2.445	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	801.000	3.334	0.000	3.138	0.000	2.487	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	901.000	3.696	0.000	3.502	0.000	2.533	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1001.000	4.058	0.000	3.865	0.000	2.583	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1101.000	4.419	0.000	4.228	0.000	2.636	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	174.665	1200.980	4.732	0.000	4.611	-0.000	2.693	0.000	0.000	5.074	4.234	125.458	MWD+IFR1+MS
1300.000	4.000	174.665	1300.838	5.537	0.000	4.940	-0.000	2.753	0.000	0.000	5.808	4.627	114.168	MWD+IFR1+MS
1400.000	6.000	174.665	1400.452	6.253	0.000	5.272	-0.000	2.819	0.000	0.000	6.511	4.973	109.294	MWD+IFR1+MS
1500.000	8.000	174.665	1499.702	6.906	0.000	5.608	-0.000	2.892	0.000	0.000	7.170	5.307	106.754	MWD+IFR1+MS
1600.000	10.000	174.665	1598.465	7.512	0.000	5.949	-0.000	2.975	0.000	0.000	7.791	5.642	105.242	MWD+IFR1+MS
1700.000	12.000	174.665	1696.623	8.080	0.000	6.296	-0.000	3.070	0.000	0.000	8.379	5.980	104.269	MWD+IFR1+MS
1800.000	14.000	174.665	1794.055	8.617	0.000	6.649	-0.000	3.178	0.000	0.000	8.941	6.325	103.616	MWD+IFR1+MS
1900.000	16.000	174.665	1890.643	9.127	0.000	7.010	-0.000	3.301	0.000	0.000	9.480	6.676	103.174	MWD+IFR1+MS
2000.000	18.000	174.665	1986.268	9.615	0.000	7.379	-0.000	3.441	0.000	0.000	10.000	7.037	102.883	MWD+IFR1+MS
2100.000	20.000	174.665	2080.816	10.084	0.000	7.758	-0.000	3.599	0.000	0.000	10.504	7.407	102.708	MWD+IFR1+MS
2200.000	22.000	174.665	2174.169	10.535	0.000	8.147	-0.000	3.776	0.000	0.000	10.992	7.788	102.629	MWD+IFR1+MS
2300.000	24.000	174.665	2266.215	10.972	0.000	8.548	-0.000	3.972	0.000	0.000	11.468	8.180	102.635	MWD+IFR1+MS
2400.000	26.000	174.665	2356.841	11.395	0.000	8.960	-0.000	4.190	0.000	0.000	11.933	8.584	102.721	MWD+IFR1+MS
2500.000	28.000	174.665	2445.937	11.807	0.000	9.386	-0.000	4.429	0.000	0.000	12.387	9.001	102.886	MWD+IFR1+MS
2600.000	30.000	174.665	2533.394	12.208	0.000	9.826	-0.000	4.689	0.000	0.000	12.832	9.432	103.132	MWD+IFR1+MS
2670.001	31.400	174.665	2593.583	12.408	0.000	10.135	-0.000	4.832	0.000	0.000	13.081	9.740	103.384	MWD+IFR1+MS
2700.000	31.400	174.665	2619.189	12.504	0.000	10.267	-0.000	4.875	0.000	0.000	13.166	9.873	103.521	MWD+IFR1+MS
2800.000	31.400	174.665	2704.544	12.828	0.000	10.723	-0.000	5.043	0.000	0.000	13.448	10.330	104.177	MWD+IFR1+MS
2900.000	31.400	174.665	2789.899	13.171	0.000	11.198	-0.000	5.226	0.000	0.000	13.750	10.798	105.044	MWD+IFR1+MS

3000.000	31.400	174.665	2875.254	13.526	0.000	11.680	-0.000	5.418	0.000	0.000	14.062	11.272	106.016	MWD+IFR1+MS
3100.000	31.400	174.665	2960.609	13.891	0.000	12.169	-0.000	5.617	0.000	0.000	14.383	11.750	107.105	MWD+IFR1+MS
3200.000	31.400	174.665	3045.964	14.264	0.000	12.664	-0.000	5.824	0.000	0.000	14.714	12.232	108.325	MWD+IFR1+MS
3300.000	31.400	174.665	3131.320	14.647	0.000	13.165	-0.000	6.037	0.000	0.000	15.054	12.715	109.694	MWD+IFR1+MS
3400.000	31.400	174.665	3216.675	15.037	0.000	13.669	-0.000	6.256	0.000	0.000	15.403	13.201	111.228	MWD+IFR1+MS
3500.000	31.400	174.665	3302.030	15.434	0.000	14.179	-0.000	6.480	0.000	0.000	15.762	13.686	112.945	MWD+IFR1+MS
3600.000	31.400	174.665	3387.385	15.839	0.000	14.691	-0.000	6.709	0.000	0.000	16.130	14.171	114.862	MWD+IFR1+MS
3700.000	31.400	174.665	3472.740	16.249	0.000	15.208	-0.000	6.942	0.000	0.000	16.509	14.654	116.989	MWD+IFR1+MS
3800.000	31.400	174.665	3558.095	16.665	0.000	15.727	-0.000	7.179	0.000	0.000	16.897	15.135	119.334	MWD+IFR1+MS
3900.000	31.400	174.665	3643.450	17.086	0.000	16.249	-0.000	7.420	0.000	0.000	17.297	15.612	121.892	MWD+IFR1+MS
4000.000	31.400	174.665	3728.805	17.513	0.000	16.773	-0.000	7.664	0.000	0.000	17.707	16.084	124.641	MWD+IFR1+MS
4100.000	31.400	174.665	3814.160	17.944	0.000	17.300	-0.000	7.911	0.000	0.000	18.130	16.551	127.546	MWD+IFR1+MS
4200.000	31.400	174.665	3899.515	18.379	0.000	17.829	-0.000	8.160	0.000	0.000	18.564	17.011	130.553	MWD+IFR1+MS
4300.000	31.400	174.665	3984.870	18.818	0.000	18.359	-0.000	8.413	0.000	0.000	19.010	17.466	133.596	MWD+IFR1+MS
4400.000	31.400	174.665	4070.225	19.261	0.000	18.891	-0.000	8.667	0.000	0.000	19.467	17.913	-43.396	MWD+IFR1+MS
4500.000	31.400	174.665	4155.580	19.708	0.000	19.425	-0.000	8.924	0.000	0.000	19.935	18.355	-40.488	MWD+IFR1+MS
4600.000	31.400	174.665	4240.935	20.157	0.000	19.961	-0.000	9.183	0.000	0.000	20.413	18.791	-37.733	MWD+IFR1+MS
4700.000	31.400	174.665	4326.290	20.610	0.000	20.497	-0.000	9.444	0.000	0.000	20.900	19.222	-35.168	MWD+IFR1+MS
4800.000	31.400	174.665	4411.646	21.065	0.000	21.035	-0.000	9.707	0.000	0.000	21.395	19.649	-32.813	MWD+IFR1+MS
4900.000	31.400	174.665	4497.001	21.524	0.000	21.574	-0.000	9.971	0.000	0.000	21.897	20.072	-30.671	MWD+IFR1+MS
5000.000	31.400	174.665	4582.356	21.984	0.000	22.114	-0.000	10.237	0.000	0.000	22.405	20.493	-28.737	MWD+IFR1+MS
5030.533	31.400	174.665	4608.417	22.123	0.000	22.277	-0.000	10.318	0.000	0.000	22.558	20.621	-28.160	MWD+IFR1+MS
5100.000	30.011	174.665	4668.144	22.521	0.000	22.644	-0.000	10.504	0.000	0.000	22.906	20.913	-27.022	MWD+IFR1+MS
5200.000	28.011	174.665	4755.592	23.137	0.000	23.168	-0.000	10.797	0.000	0.000	23.423	21.371	-26.417	MWD+IFR1+MS
5300.000	26.011	174.665	4844.680	23.747	0.000	23.680	-0.000	11.083	0.000	0.000	23.939	21.847	-26.352	MWD+IFR1+MS
5400.000	24.011	174.665	4935.298	24.314	0.000	24.178	-0.000	11.345	0.000	0.000	24.442	22.319	-26.413	MWD+IFR1+MS
5500.000	22.011	174.665	5027.337	24.839	0.000	24.660	-0.000	11.584	0.000	0.000	24.932	22.787	-26.588	MWD+IFR1+MS
5600.000	20.011	174.665	5120.683	25.322	0.000	25.127	-0.000	11.802	0.000	0.000	25.407	23.248	-26.866	MWD+IFR1+MS
5700.000	18.011	174.665	5215.224	25.761	0.000	25.577	-0.000	11.999	0.000	0.000	25.867	23.702	-27.241	MWD+IFR1+MS
5800.000	16.011	174.665	5310.844	26.156	0.000	26.010	-0.000	12.178	0.000	0.000	26.313	24.147	-27.705	MWD+IFR1+MS
5900.000	14.011	174.665	5407.427	26.508	0.000	26.426	-0.000	12.340	0.000	0.000	26.743	24.581	-28.254	MWD+IFR1+MS
6000.000	12.011	174.665	5504.855	26.815	0.000	26.825	-0.000	12.486	0.000	0.000	27.157	25.003	-28.883	MWD+IFR1+MS
6100.000	10.011	174.665	5603.009	27.078	0.000	27.206	-0.000	12.619	0.000	0.000	27.556	25.413	-29.589	MWD+IFR1+MS

6200.000	8.011	174.665	5701.770	27.297	0.000	27.569	-0.000	12.739	0.000	0.000	27.939	25.810	-30.368	MWD+IFR1+MS
6300.000	6.011	174.665	5801.018	27.472	0.000	27.915	-0.000	12.848	0.000	0.000	28.305	26.192	-31.215	MWD+IFR1+MS
6400.000	4.011	174.665	5900.630	27.604	0.000	28.243	-0.000	12.948	0.000	0.000	28.657	26.558	-32.127	MWD+IFR1+MS
6500.000	2.011	174.665	6000.487	27.692	0.000	28.553	-0.000	13.040	0.000	0.000	28.992	26.909	-33.097	MWD+IFR1+MS
6600.533	0.000	0.000	6101.000	27.802	0.000	28.654	0.000	13.127	0.000	0.000	29.251	27.174	-32.881	MWD+IFR1+MS
6700.000	0.000	0.000	6200.467	28.081	0.000	28.896	0.000	13.212	0.000	0.000	29.511	27.434	-33.443	MWD+IFR1+MS
6800.000	0.000	0.000	6300.467	28.332	0.000	29.141	0.000	13.299	0.000	0.000	29.757	27.684	-33.503	MWD+IFR1+MS
6900.000	0.000	0.000	6400.467	28.584	0.000	29.388	0.000	13.389	0.000	0.000	30.006	27.936	-33.563	MWD+IFR1+MS
7000.000	0.000	0.000	6500.467	28.839	0.000	29.638	0.000	13.482	0.000	0.000	30.257	28.190	-33.622	MWD+IFR1+MS
7100.000	0.000	0.000	6600.467	29.096	0.000	29.890	0.000	13.577	0.000	0.000	30.510	28.446	-33.681	MWD+IFR1+MS
7200.000	0.000	0.000	6700.467	29.356	0.000	30.144	0.000	13.675	0.000	0.000	30.765	28.705	-33.738	MWD+IFR1+MS
7300.000	0.000	0.000	6800.467	29.617	0.000	30.401	0.000	13.776	0.000	0.000	31.022	28.966	-33.795	MWD+IFR1+MS
7400.000	0.000	0.000	6900.467	29.880	0.000	30.659	0.000	13.880	0.000	0.000	31.281	29.228	-33.851	MWD+IFR1+MS
7500.000	0.000	0.000	7000.467	30.146	0.000	30.919	0.000	13.986	0.000	0.000	31.543	29.493	-33.906	MWD+IFR1+MS
7600.000	0.000	0.000	7100.467	30.413	0.000	31.182	0.000	14.096	0.000	0.000	31.806	29.760	-33.960	MWD+IFR1+MS
7700.000	0.000	0.000	7200.467	30.682	0.000	31.446	0.000	14.208	0.000	0.000	32.071	30.029	-34.014	MWD+IFR1+MS
7800.000	0.000	0.000	7300.467	30.953	0.000	31.712	0.000	14.323	0.000	0.000	32.337	30.299	-34.067	MWD+IFR1+MS
7900.000	0.000	0.000	7400.467	31.226	0.000	31.980	0.000	14.442	0.000	0.000	32.606	30.571	-34.119	MWD+IFR1+MS
8000.000	0.000	0.000	7500.467	31.500	0.000	32.249	0.000	14.563	0.000	0.000	32.876	30.846	-34.170	MWD+IFR1+MS
8100.000	0.000	0.000	7600.467	31.776	0.000	32.521	0.000	14.688	0.000	0.000	33.148	31.121	-34.221	MWD+IFR1+MS
8200.000	0.000	0.000	7700.467	32.054	0.000	32.794	0.000	14.815	0.000	0.000	33.421	31.399	-34.271	MWD+IFR1+MS
8300.000	0.000	0.000	7800.467	32.333	0.000	33.068	0.000	14.946	0.000	0.000	33.697	31.678	-34.321	MWD+IFR1+MS
8400.000	0.000	0.000	7900.467	32.614	0.000	33.344	0.000	15.080	0.000	0.000	33.973	31.958	-34.370	MWD+IFR1+MS
8500.000	0.000	0.000	8000.467	32.896	0.000	33.622	0.000	15.218	0.000	0.000	34.251	32.241	-34.418	MWD+IFR1+MS
8600.000	0.000	0.000	8100.467	33.180	0.000	33.901	0.000	15.358	0.000	0.000	34.531	32.524	-34.465	MWD+IFR1+MS
8700.000	0.000	0.000	8200.467	33.466	0.000	34.182	0.000	15.502	0.000	0.000	34.812	32.810	-34.512	MWD+IFR1+MS
8800.000	0.000	0.000	8300.467	33.752	0.000	34.464	0.000	15.649	0.000	0.000	35.095	33.096	-34.559	MWD+IFR1+MS
8900.000	0.000	0.000	8400.467	34.040	0.000	34.748	0.000	15.800	0.000	0.000	35.379	33.384	-34.605	MWD+IFR1+MS
9000.000	0.000	0.000	8500.467	34.330	0.000	35.033	0.000	15.953	0.000	0.000	35.664	33.673	-34.650	MWD+IFR1+MS
9100.000	0.000	0.000	8600.467	34.620	0.000	35.319	0.000	16.111	0.000	0.000	35.951	33.964	-34.695	MWD+IFR1+MS
9200.000	0.000	0.000	8700.467	34.912	0.000	35.607	0.000	16.271	0.000	0.000	36.238	34.256	-34.739	MWD+IFR1+MS
9300.000	0.000	0.000	8800.467	35.205	0.000	35.896	0.000	16.436	0.000	0.000	36.528	34.549	-34.782	MWD+IFR1+MS
9400.000	0.000	0.000	8900.467	35.499	0.000	36.186	0.000	16.603	0.000	0.000	36.818	34.844	-34.825	MWD+IFR1+MS

9500.000	0.000	0.000	9000.467	35.795	0.000	36.477	0.000	16.774	0.000	0.000	37.109	35.139	-34.868	MWD+IFR1+MS
9600.000	0.000	0.000	9100.467	36.092	0.000	36.770	0.000	16.949	0.000	0.000	37.402	35.436	-34.910	MWD+IFR1+MS
9700.000	0.000	0.000	9200.467	36.389	0.000	37.063	0.000	17.127	0.000	0.000	37.696	35.734	-34.951	MWD+IFR1+MS
9800.000	0.000	0.000	9300.467	36.688	0.000	37.358	0.000	17.308	0.000	0.000	37.991	36.033	-34.992	MWD+IFR1+MS
9900.000	0.000	0.000	9400.467	36.988	0.000	37.654	0.000	17.494	0.000	0.000	38.287	36.333	-35.033	MWD+IFR1+MS
10000.000	0.000	0.000	9500.467	37.289	0.000	37.951	0.000	17.682	0.000	0.000	38.584	36.634	-35.073	MWD+IFR1+MS
10100.000	0.000	0.000	9600.467	37.591	0.000	38.249	0.000	17.875	0.000	0.000	38.882	36.936	-35.112	MWD+IFR1+MS
10200.000	0.000	0.000	9700.467	37.894	0.000	38.548	0.000	18.070	0.000	0.000	39.181	37.239	-35.152	MWD+IFR1+MS
10300.000	0.000	0.000	9800.467	38.198	0.000	38.848	0.000	18.270	0.000	0.000	39.481	37.543	-35.190	MWD+IFR1+MS
10400.000	0.000	0.000	9900.467	38.503	0.000	39.149	0.000	18.473	0.000	0.000	39.782	37.848	-35.228	MWD+IFR1+MS
10500.000	0.000	0.000	10000.467	38.808	0.000	39.452	0.000	18.680	0.000	0.000	40.085	38.154	-35.266	MWD+IFR1+MS
10600.000	0.000	0.000	10100.467	39.115	0.000	39.754	0.000	18.890	0.000	0.000	40.388	38.461	-35.304	MWD+IFR1+MS
10700.000	0.000	0.000	10200.467	39.422	0.000	40.058	0.000	19.104	0.000	0.000	40.691	38.769	-35.340	MWD+IFR1+MS
10800.000	0.000	0.000	10300.467	39.731	0.000	40.363	0.000	19.321	0.000	0.000	40.996	39.077	-35.377	MWD+IFR1+MS
10900.000	0.000	0.000	10400.467	40.040	0.000	40.669	0.000	19.542	0.000	0.000	41.302	39.387	-35.413	MWD+IFR1+MS
11000.000	0.000	0.000	10500.467	40.350	0.000	40.975	0.000	19.767	0.000	0.000	41.608	39.697	-35.449	MWD+IFR1+MS
11100.000	0.000	0.000	10600.467	40.661	0.000	41.283	0.000	19.995	0.000	0.000	41.916	40.008	-35.484	MWD+IFR1+MS
11200.000	0.000	0.000	10700.467	40.972	0.000	41.591	0.000	20.227	0.000	0.000	42.224	40.320	-35.519	MWD+IFR1+MS
11300.000	0.000	0.000	10800.467	41.285	0.000	41.900	0.000	20.463	0.000	0.000	42.533	40.633	-35.553	MWD+IFR1+MS
11400.000	0.000	0.000	10900.467	41.598	0.000	42.210	0.000	20.702	0.000	0.000	42.842	40.946	-35.587	MWD+IFR1+MS
11500.000	0.000	0.000	11000.467	41.912	0.000	42.520	0.000	20.945	0.000	0.000	43.153	41.260	-35.621	MWD+IFR1+MS
11600.000	0.000	0.000	11100.467	42.226	0.000	42.831	0.000	21.192	0.000	0.000	43.464	41.575	-35.655	MWD+IFR1+MS
11700.000	0.000	0.000	11200.467	42.541	0.000	43.143	0.000	21.442	0.000	0.000	43.776	41.891	-35.688	MWD+IFR1+MS
11800.000	0.000	0.000	11300.467	42.857	0.000	43.456	0.000	21.696	0.000	0.000	44.088	42.207	-35.720	MWD+IFR1+MS
11900.000	0.000	0.000	11400.467	43.174	0.000	43.770	0.000	21.953	0.000	0.000	44.402	42.524	-35.753	MWD+IFR1+MS
12000.000	0.000	0.000	11500.467	43.491	0.000	44.084	0.000	22.214	0.000	0.000	44.716	42.841	-35.785	MWD+IFR1+MS
12064.336	0.000	0.000	11564.803	43.694	0.000	44.285	0.000	22.384	0.000	0.000	44.915	43.046	-35.790	MWD+IFR1+MS
12100.000	2.853	359.771	11600.452	43.362	0.000	44.401	0.000	22.478	0.000	0.000	45.025	43.160	-35.849	MWD+IFR1+MS
12200.000	10.853	359.771	11699.657	42.458	0.000	44.695	0.000	22.755	0.000	0.000	45.506	43.690	-42.440	MWD+IFR1+MS
12300.000	18.853	359.771	11796.237	41.525	0.000	44.967	0.000	23.126	0.000	0.000	46.305	44.285	125.001	MWD+IFR1+MS
12400.000	26.853	359.771	11888.312	40.120	0.000	45.212	0.000	23.646	0.000	0.000	47.122	44.682	117.247	MWD+IFR1+MS
12500.000	34.853	359.771	11974.091	38.374	0.000	45.430	0.000	24.358	0.000	0.000	47.850	44.970	112.982	MWD+IFR1+MS
12600.000	42.853	359.771	12051.904	36.458	0.000	45.618	0.000	25.280	0.000	0.000	48.443	45.191	110.685	MWD+IFR1+MS

12700.000	50.853	359.771	12120.235	34.587	0.000	45.778	0.000	26.411	0.000	0.000	48.887	45.362	109.525	MWD+IFR1+MS
12800.000	58.853	359.771	12177.756	33.011	0.000	45.910	0.000	27.726	0.000	0.000	49.189	45.492	109.068	MWD+IFR1+MS
12900.000	66.853	359.771	12223.346	31.992	0.000	46.015	0.000	29.183	0.000	0.000	49.367	45.588	109.059	MWD+IFR1+MS
13000.000	74.853	359.771	12256.119	31.752	0.000	46.094	0.000	30.734	0.000	0.000	49.450	45.654	109.304	MWD+IFR1+MS
13100.000	82.853	359.771	12275.435	32.409	0.000	46.147	0.000	32.325	0.000	0.000	49.472	45.696	109.615	MWD+IFR1+MS
13189.336	90.000	359.771	12281.000	33.506	0.000	46.171	0.000	33.506	0.000	0.000	49.471	45.716	109.764	MWD+IFR1+MS
13200.000	90.000	359.771	12281.000	33.539	0.000	46.172	0.000	33.539	0.000	0.000	49.471	45.717	109.763	MWD+IFR1+MS
13300.000	90.000	359.771	12281.000	33.826	0.000	46.195	0.000	33.826	0.000	0.000	49.470	45.740	109.850	MWD+IFR1+MS
13400.000	90.000	359.771	12281.000	34.132	0.000	46.238	0.000	34.132	0.000	0.000	49.472	45.780	110.030	MWD+IFR1+MS
13500.000	90.000	359.771	12281.000	34.454	0.000	46.298	0.000	34.454	0.000	0.000	49.477	45.835	110.293	MWD+IFR1+MS
13600.000	90.000	359.771	12281.000	34.790	0.000	46.375	0.000	34.790	0.000	0.000	49.484	45.905	110.647	MWD+IFR1+MS
13700.000	90.000	359.771	12281.000	35.140	0.000	46.468	0.000	35.140	0.000	0.000	49.494	45.989	111.098	MWD+IFR1+MS
13800.000	90.000	359.771	12281.000	35.505	0.000	46.578	0.000	35.505	0.000	0.000	49.507	46.087	111.659	MWD+IFR1+MS
13900.000	90.000	359.771	12281.000	35.882	0.000	46.704	0.000	35.882	0.000	0.000	49.524	46.199	112.340	MWD+IFR1+MS
14000.000	90.000	359.771	12281.000	36.273	0.000	46.846	0.000	36.273	0.000	0.000	49.545	46.323	113.160	MWD+IFR1+MS
14100.000	90.000	359.771	12281.000	36.677	0.000	47.004	0.000	36.677	0.000	0.000	49.570	46.460	114.138	MWD+IFR1+MS
14200.000	90.000	359.771	12281.000	37.093	0.000	47.178	0.000	37.093	0.000	0.000	49.601	46.608	115.299	MWD+IFR1+MS
14300.000	90.000	359.771	12281.000	37.520	0.000	47.368	0.000	37.520	0.000	0.000	49.637	46.766	116.671	MWD+IFR1+MS
14400.000	90.000	359.771	12281.000	37.959	0.000	47.573	0.000	37.959	0.000	0.000	49.681	46.933	118.289	MWD+IFR1+MS
14500.000	90.000	359.771	12281.000	38.409	0.000	47.794	0.000	38.409	0.000	0.000	49.734	47.107	120.190	MWD+IFR1+MS
14600.000	90.000	359.771	12281.000	38.870	0.000	48.030	0.000	38.870	0.000	0.000	49.799	47.285	122.413	MWD+IFR1+MS
14700.000	90.000	359.771	12281.000	39.341	0.000	48.281	0.000	39.341	0.000	0.000	49.876	47.466	124.990	MWD+IFR1+MS
14800.000	90.000	359.771	12281.000	39.821	0.000	48.546	0.000	39.821	0.000	0.000	49.970	47.645	127.939	MWD+IFR1+MS
14900.000	90.000	359.771	12281.000	40.312	0.000	48.826	0.000	40.312	0.000	0.000	50.084	47.820	131.250	MWD+IFR1+MS
15000.000	90.000	359.771	12281.000	40.811	0.000	49.121	0.000	40.811	0.000	0.000	50.221	47.987	134.871	MWD+IFR1+MS
15100.000	90.000	359.771	12281.000	41.320	0.000	49.429	0.000	41.320	0.000	0.000	50.384	48.142	-41.301	MWD+IFR1+MS
15200.000	90.000	359.771	12281.000	41.836	0.000	49.750	0.000	41.836	0.000	0.000	50.575	48.283	-37.409	MWD+IFR1+MS
15300.000	90.000	359.771	12281.000	42.362	0.000	50.086	0.000	42.362	0.000	0.000	50.796	48.408	-33.606	MWD+IFR1+MS
15400.000	90.000	359.771	12281.000	42.895	0.000	50.434	0.000	42.895	0.000	0.000	51.047	48.518	-30.027	MWD+IFR1+MS
15500.000	90.000	359.771	12281.000	43.435	0.000	50.795	0.000	43.435	0.000	0.000	51.325	48.614	-26.762	MWD+IFR1+MS
15600.000	90.000	359.771	12281.000	43.984	0.000	51.169	0.000	43.984	0.000	0.000	51.629	48.697	-23.853	MWD+IFR1+MS
15700.000	90.000	359.771	12281.000	44.539	0.000	51.555	0.000	44.539	0.000	0.000	51.956	48.769	-21.301	MWD+IFR1+MS
15800.000	90.000	359.771	12281.000	45.101	0.000	51.954	0.000	45.101	0.000	0.000	52.305	48.832	-19.084	MWD+IFR1+MS

15900.000	90.000	359.771	12281.000	45.669	0.000	52.364	0.000	45.669	0.000	0.000	52.674	48.889	-17.164	MWD+IFR1+MS
16000.000	90.000	359.771	12281.000	46.244	0.000	52.785	0.000	46.244	0.000	0.000	53.061	48.939	-15.505	MWD+IFR1+MS
16100.000	90.000	359.771	12281.000	46.825	0.000	53.218	0.000	46.825	0.000	0.000	53.464	48.985	-14.067	MWD+IFR1+MS
16200.000	90.000	359.771	12281.000	47.412	0.000	53.662	0.000	47.412	0.000	0.000	53.882	49.027	-12.818	MWD+IFR1+MS
16300.000	90.000	359.771	12281.000	48.005	0.000	54.116	0.000	48.005	0.000	0.000	54.315	49.066	-11.728	MWD+IFR1+MS
16400.000	90.000	359.771	12281.000	48.602	0.000	54.581	0.000	48.602	0.000	0.000	54.761	49.103	-10.773	MWD+IFR1+MS
16500.000	90.000	359.771	12281.000	49.206	0.000	55.056	0.000	49.206	0.000	0.000	55.219	49.138	-9.932	MWD+IFR1+MS
16600.000	90.000	359.771	12281.000	49.814	0.000	55.541	0.000	49.814	0.000	0.000	55.690	49.172	-9.188	MWD+IFR1+MS
16700.000	90.000	359.771	12281.000	50.427	0.000	56.036	0.000	50.427	0.000	0.000	56.172	49.204	-8.528	MWD+IFR1+MS
16800.000	90.000	359.771	12281.000	51.045	0.000	56.539	0.000	51.045	0.000	0.000	56.665	49.236	-7.938	MWD+IFR1+MS
16900.000	90.000	359.771	12281.000	51.667	0.000	57.053	0.000	51.667	0.000	0.000	57.168	49.267	-7.410	MWD+IFR1+MS
17000.000	90.000	359.771	12281.000	52.294	0.000	57.575	0.000	52.294	0.000	0.000	57.681	49.297	-6.935	MWD+IFR1+MS
17100.000	90.000	359.771	12281.000	52.925	0.000	58.105	0.000	52.925	0.000	0.000	58.203	49.328	-6.506	MWD+IFR1+MS
17200.000	90.000	359.771	12281.000	53.560	0.000	58.644	0.000	53.560	0.000	0.000	58.735	49.358	-6.118	MWD+IFR1+MS
17300.000	90.000	359.771	12281.000	54.199	0.000	59.192	0.000	54.199	0.000	0.000	59.276	49.388	-5.764	MWD+IFR1+MS
17400.000	90.000	359.771	12281.000	54.842	0.000	59.747	0.000	54.842	0.000	0.000	59.826	49.418	-5.442	MWD+IFR1+MS
17500.000	90.000	359.771	12281.000	55.488	0.000	60.310	0.000	55.488	0.000	0.000	60.383	49.448	-5.147	MWD+IFR1+MS
17600.000	90.000	359.771	12281.000	56.138	0.000	60.881	0.000	56.138	0.000	0.000	60.949	49.478	-4.877	MWD+IFR1+MS
17700.000	90.000	359.771	12281.000	56.791	0.000	61.458	0.000	56.791	0.000	0.000	61.522	49.508	-4.628	MWD+IFR1+MS
17800.000	90.000	359.771	12281.000	57.448	0.000	62.043	0.000	57.448	0.000	0.000	62.103	49.538	-4.399	MWD+IFR1+MS
17900.000	90.000	359.771	12281.000	58.108	0.000	62.635	0.000	58.108	0.000	0.000	62.691	49.569	-4.188	MWD+IFR1+MS
18000.000	90.000	359.771	12281.000	58.771	0.000	63.234	0.000	58.771	0.000	0.000	63.287	49.600	-3.992	MWD+IFR1+MS
18100.000	90.000	359.771	12281.000	59.437	0.000	63.839	0.000	59.437	0.000	0.000	63.889	49.632	-3.810	MWD+IFR1+MS
18200.000	90.000	359.771	12281.000	60.105	0.000	64.451	0.000	60.105	0.000	0.000	64.497	49.663	-3.641	MWD+IFR1+MS
18300.000	90.000	359.771	12281.000	60.777	0.000	65.068	0.000	60.777	0.000	0.000	65.112	49.695	-3.484	MWD+IFR1+MS
18400.000	90.000	359.771	12281.000	61.451	0.000	65.692	0.000	61.451	0.000	0.000	65.734	49.728	-3.337	MWD+IFR1+MS
18500.000	90.000	359.771	12281.000	62.128	0.000	66.322	0.000	62.128	0.000	0.000	66.361	49.761	-3.199	MWD+IFR1+MS
18600.000	90.000	359.771	12281.000	62.807	0.000	66.957	0.000	62.807	0.000	0.000	66.994	49.794	-3.071	MWD+IFR1+MS
18700.000	90.000	359.771	12281.000	63.489	0.000	67.598	0.000	63.489	0.000	0.000	67.633	49.828	-2.950	MWD+IFR1+MS
18800.000	90.000	359.771	12281.000	64.173	0.000	68.244	0.000	64.173	0.000	0.000	68.277	49.862	-2.837	MWD+IFR1+MS
18900.000	90.000	359.771	12281.000	64.859	0.000	68.895	0.000	64.859	0.000	0.000	68.926	49.897	-2.731	MWD+IFR1+MS
19000.000	90.000	359.771	12281.000	65.548	0.000	69.551	0.000	65.548	0.000	0.000	69.581	49.932	-2.631	MWD+IFR1+MS
19100.000	90.000	359.771	12281.000	66.238	0.000	70.213	0.000	66.238	0.000	0.000	70.241	49.967	-2.537	MWD+IFR1+MS

19200.000	90.000	359.771	12281.000	66.931	0.000	70.879	0.000	66.931	0.000	0.000	70.905	50.004	-2.448	MWD+IFR1+MS
19300.000	90.000	359.771	12281.000	67.626	0.000	71.549	0.000	67.626	0.000	0.000	71.575	50.040	-2.364	MWD+IFR1+MS
19400.000	90.000	359.771	12281.000	68.323	0.000	72.224	0.000	68.323	0.000	0.000	72.248	50.077	-2.284	MWD+IFR1+MS
19500.000	90.000	359.771	12281.000	69.021	0.000	72.904	0.000	69.021	0.000	0.000	72.927	50.115	-2.209	MWD+IFR1+MS
19600.000	90.000	359.771	12281.000	69.722	0.000	73.588	0.000	69.722	0.000	0.000	73.610	50.153	-2.138	MWD+IFR1+MS
19700.000	90.000	359.771	12281.000	70.424	0.000	74.276	0.000	70.424	0.000	0.000	74.296	50.191	-2.070	MWD+IFR1+MS
19800.000	90.000	359.771	12281.000	71.128	0.000	74.968	0.000	71.128	0.000	0.000	74.988	50.231	-2.006	MWD+IFR1+MS
19900.000	90.000	359.771	12281.000	71.834	0.000	75.664	0.000	71.834	0.000	0.000	75.683	50.270	-1.945	MWD+IFR1+MS
20000.000	90.000	359.771	12281.000	72.541	0.000	76.363	0.000	72.541	0.000	0.000	76.381	50.310	-1.886	MWD+IFR1+MS
20100.000	90.000	359.771	12281.000	73.250	0.000	77.067	0.000	73.250	0.000	0.000	77.084	50.351	-1.831	MWD+IFR1+MS
20200.000	90.000	359.771	12281.000	73.960	0.000	77.774	0.000	73.960	0.000	0.000	77.790	50.392	-1.778	MWD+IFR1+MS
20300.000	90.000	359.771	12281.000	74.672	0.000	78.484	0.000	74.672	0.000	0.000	78.500	50.434	-1.728	MWD+IFR1+MS
20400.000	90.000	359.771	12281.000	75.385	0.000	79.198	0.000	75.385	0.000	0.000	79.213	50.476	-1.680	MWD+IFR1+MS
20500.000	90.000	359.771	12281.000	76.100	0.000	79.916	0.000	76.100	0.000	0.000	79.930	50.519	-1.634	MWD+IFR1+MS
20600.000	90.000	359.771	12281.000	76.816	0.000	80.636	0.000	76.816	0.000	0.000	80.650	50.562	-1.591	MWD+IFR1+MS
20700.000	90.000	359.771	12281.000	77.534	0.000	81.360	0.000	77.534	0.000	0.000	81.373	50.606	-1.549	MWD+IFR1+MS
20800.000	90.000	359.771	12281.000	78.252	0.000	82.087	0.000	78.252	0.000	0.000	82.099	50.651	-1.509	MWD+IFR1+MS
20900.000	90.000	359.771	12281.000	78.972	0.000	82.816	0.000	78.972	0.000	0.000	82.829	50.695	-1.471	MWD+IFR1+MS
21000.000	90.000	359.771	12281.000	79.694	0.000	83.549	0.000	79.694	0.000	0.000	83.561	50.741	-1.434	MWD+IFR1+MS
21100.000	90.000	359.771	12281.000	80.416	0.000	84.285	0.000	80.416	0.000	0.000	84.296	50.787	-1.399	MWD+IFR1+MS
21200.000	90.000	359.771	12281.000	81.139	0.000	85.023	0.000	81.139	0.000	0.000	85.034	50.833	-1.365	MWD+IFR1+MS
21300.000	90.000	359.771	12281.000	81.864	0.000	85.764	0.000	81.864	0.000	0.000	85.774	50.880	-1.332	MWD+IFR1+MS
21400.000	90.000	359.771	12281.000	82.590	0.000	86.507	0.000	82.590	0.000	0.000	86.517	50.928	-1.301	MWD+IFR1+MS
21500.000	90.000	359.771	12281.000	83.317	0.000	87.254	0.000	83.317	0.000	0.000	87.263	50.976	-1.271	MWD+IFR1+MS
21600.000	90.000	359.771	12281.000	84.045	0.000	88.002	0.000	84.045	0.000	0.000	88.011	51.025	-1.243	MWD+IFR1+MS
21700.000	90.000	359.771	12281.000	84.774	0.000	88.753	0.000	84.774	0.000	0.000	88.762	51.074	-1.215	MWD+IFR1+MS
21800.000	90.000	359.771	12281.000	85.503	0.000	89.507	0.000	85.503	0.000	0.000	89.515	51.124	-1.188	MWD+IFR1+MS
21900.000	90.000	359.771	12281.000	86.234	0.000	90.262	0.000	86.234	0.000	0.000	90.270	51.174	-1.163	MWD+IFR1+MS
22000.000	90.000	359.771	12281.000	86.966	0.000	91.020	0.000	86.966	0.000	0.000	91.028	51.225	-1.138	MWD+IFR1+MS
22100.000	90.000	359.771	12281.000	87.699	0.000	91.780	0.000	87.699	0.000	0.000	91.788	51.276	-1.114	MWD+IFR1+MS
22200.000	90.000	359.771	12281.000	88.432	0.000	92.543	0.000	88.432	0.000	0.000	92.550	51.328	-1.091	MWD+IFR1+MS
22300.000	90.000	359.771	12281.000	89.167	0.000	93.307	0.000	89.167	0.000	0.000	93.314	51.380	-1.069	MWD+IFR1+MS
22400.000	90.000	359.771	12281.000	89.902	0.000	94.073	0.000	89.902	0.000	0.000	94.080	51.433	-1.048	MWD+IFR1+MS

22500.000	90.000	359.771	12281.000	90.638	0.000	94.842	0.000	90.638	0.000	0.000	94.848	51.486	-1.027	MWD+IFR1+MS
22600.000	90.000	359.771	12281.000	91.375	0.000	95.612	0.000	91.375	0.000	0.000	95.618	51.540	-1.007	MWD+IFR1+MS
22700.000	90.000	359.771	12281.000	92.113	0.000	96.384	0.000	92.113	0.000	0.000	96.390	51.595	-0.988	MWD+IFR1+MS
22800.000	90.000	359.771	12281.000	92.852	0.000	97.158	0.000	92.852	0.000	0.000	97.164	51.650	-0.970	MWD+IFR1+MS
22900.000	90.000	359.771	12281.000	93.591	0.000	97.934	0.000	93.591	0.000	0.000	97.940	51.705	-0.952	MWD+IFR1+MS
23000.000	90.000	359.771	12281.000	94.331	0.000	98.712	0.000	94.331	0.000	0.000	98.717	51.761	-0.934	MWD+IFR1+MS
23100.000	90.000	359.771	12281.000	95.072	0.000	99.491	0.000	95.072	0.000	0.000	99.497	51.818	-0.918	MWD+IFR1+MS
23200.000	90.000	359.771	12281.000	95.813	0.000	100.272	0.000	95.813	0.000	0.000	100.277	51.875	-0.901	MWD+IFR1+MS
23300.000	90.000	359.771	12281.000	96.555	0.000	101.055	0.000	96.555	0.000	0.000	101.060	51.933	-0.886	MWD+IFR1+MS
23400.000	90.000	359.771	12281.000	97.298	0.000	101.839	0.000	97.298	0.000	0.000	101.844	51.991	-0.870	MWD+IFR1+MS
23500.000	90.000	359.771	12281.000	98.041	0.000	102.625	0.000	98.041	0.000	0.000	102.630	52.049	-0.856	MWD+IFR1+MS
23600.000	90.000	359.771	12281.000	98.785	0.000	103.412	0.000	98.785	0.000	0.000	103.417	52.108	-0.841	MWD+IFR1+MS
23700.000	90.000	359.771	12281.000	99.530	0.000	104.201	0.000	99.530	0.000	0.000	104.206	52.168	-0.827	MWD+IFR1+MS
23800.000	90.000	359.771	12281.000	100.276	0.000	104.992	0.000	100.276	0.000	0.000	104.996	52.228	-0.814	MWD+IFR1+MS
23900.000	90.000	359.771	12281.000	101.021	0.000	105.783	0.000	101.021	0.000	0.000	105.787	52.289	-0.801	MWD+IFR1+MS
24000.000	90.000	359.771	12281.000	101.768	0.000	106.577	0.000	101.768	0.000	0.000	106.580	52.350	-0.788	MWD+IFR1+MS
24100.000	90.000	359.771	12281.000	102.515	0.000	107.371	0.000	102.515	0.000	0.000	107.375	52.412	-0.776	MWD+IFR1+MS
24200.000	90.000	359.771	12281.000	103.263	0.000	108.167	0.000	103.263	0.000	0.000	108.170	52.474	-0.764	MWD+IFR1+MS
24300.000	90.000	359.771	12281.000	104.011	0.000	108.964	0.000	104.011	0.000	0.000	108.967	52.536	-0.753	MWD+IFR1+MS
24400.000	90.000	359.771	12281.000	104.760	0.000	109.762	0.000	104.760	0.000	0.000	109.766	52.600	-0.741	MWD+IFR1+MS
24500.000	90.000	359.771	12281.000	105.509	0.000	110.562	0.000	105.509	0.000	0.000	110.565	52.663	-0.730	MWD+IFR1+MS
24600.000	90.000	359.771	12281.000	106.259	0.000	111.363	0.000	106.259	0.000	0.000	111.366	52.727	-0.720	MWD+IFR1+MS
24700.000	90.000	359.771	12281.000	107.009	0.000	112.165	0.000	107.009	0.000	0.000	112.168	52.792	-0.710	MWD+IFR1+MS
24800.000	90.000	359.771	12281.000	107.760	0.000	112.968	0.000	107.760	0.000	0.000	112.971	52.857	-0.700	MWD+IFR1+MS
24900.000	90.000	359.771	12281.000	108.511	0.000	113.773	0.000	108.511	0.000	0.000	113.776	52.923	-0.690	MWD+IFR1+MS
25000.000	90.000	359.771	12281.000	109.262	0.000	114.578	0.000	109.262	0.000	0.000	114.581	52.989	-0.680	MWD+IFR1+MS
25100.000	90.000	359.771	12281.000	110.015	0.000	115.385	0.000	110.015	0.000	0.000	115.388	53.056	-0.671	MWD+IFR1+MS
25200.000	90.000	359.771	12281.000	110.767	0.000	116.193	0.000	110.767	0.000	0.000	116.195	53.123	-0.662	MWD+IFR1+MS
25300.000	90.000	359.771	12281.000	111.520	0.000	117.001	0.000	111.520	0.000	0.000	117.004	53.190	-0.653	MWD+IFR1+MS
25400.000	90.000	359.771	12281.000	112.274	0.000	117.811	0.000	112.274	0.000	0.000	117.814	53.258	-0.645	MWD+IFR1+MS
25500.000	90.000	359.771	12281.000	113.028	0.000	118.622	0.000	113.028	0.000	0.000	118.624	53.327	-0.637	MWD+IFR1+MS
25600.000	90.000	359.771	12281.000	113.782	0.000	119.434	0.000	113.782	0.000	0.000	119.436	53.396	-0.629	MWD+IFR1+MS
25700.000	90.000	359.771	12281.000	114.537	0.000	120.247	0.000	114.537	0.000	0.000	120.249	53.465	-0.621	MWD+IFR1+MS

25800.000	90.000	359.771	12281.000	115.292	0.000	121.060	0.000	115.292	0.000	0.000	121.062	53.535	-0.613	MWD+IFR1+MS
25900.000	90.000	359.771	12281.000	116.047	0.000	121.875	0.000	116.047	0.000	0.000	121.877	53.606	-0.606	MWD+IFR1+MS
26000.000	90.000	359.771	12281.000	116.803	0.000	122.690	0.000	116.803	0.000	0.000	122.693	53.677	-0.598	MWD+IFR1+MS
26100.000	90.000	359.771	12281.000	117.560	0.000	123.507	0.000	117.560	0.000	0.000	123.509	53.748	-0.591	MWD+IFR1+MS
26200.000	90.000	359.771	12281.000	118.316	0.000	124.324	0.000	118.316	0.000	0.000	124.326	53.820	-0.584	MWD+IFR1+MS
26300.000	90.000	359.771	12281.000	119.073	0.000	125.142	0.000	119.073	0.000	0.000	125.144	53.892	-0.578	MWD+IFR1+MS
26400.000	90.000	359.771	12281.000	119.831	0.000	125.961	0.000	119.831	0.000	0.000	125.963	53.965	-0.571	MWD+IFR1+MS
26500.000	90.000	359.771	12281.000	120.589	0.000	126.781	0.000	120.589	0.000	0.000	126.783	54.039	-0.565	MWD+IFR1+MS
26600.000	90.000	359.771	12281.000	121.347	0.000	127.602	0.000	121.347	0.000	0.000	127.604	54.112	-0.558	MWD+IFR1+MS
26700.000	90.000	359.771	12281.000	122.105	0.000	128.423	0.000	122.105	0.000	0.000	128.425	54.186	-0.552	MWD+IFR1+MS
26800.000	90.000	359.771	12281.000	122.864	0.000	129.246	0.000	122.864	0.000	0.000	129.247	54.261	-0.546	MWD+IFR1+MS
26900.000	90.000	359.771	12281.000	123.623	0.000	130.069	0.000	123.623	0.000	0.000	130.070	54.336	-0.540	MWD+IFR1+MS
27000.000	90.000	359.771	12281.000	124.382	0.000	130.892	0.000	124.382	0.000	0.000	130.894	54.412	-0.535	MWD+IFR1+MS
27100.000	90.000	359.771	12281.000	125.142	0.000	131.717	0.000	125.142	0.000	0.000	131.718	54.488	-0.529	MWD+IFR1+MS
27200.000	90.000	359.771	12281.000	125.902	0.000	132.542	0.000	125.902	0.000	0.000	132.544	54.564	-0.524	MWD+IFR1+MS
27300.000	90.000	359.771	12281.000	126.662	0.000	133.368	0.000	126.662	0.000	0.000	133.370	54.641	-0.518	MWD+IFR1+MS
27400.000	90.000	359.771	12281.000	127.423	0.000	134.195	0.000	127.423	0.000	0.000	134.196	54.719	-0.513	MWD+IFR1+MS
27500.000	90.000	359.771	12281.000	128.184	0.000	135.022	0.000	128.184	0.000	0.000	135.023	54.797	-0.508	MWD+IFR1+MS
27600.000	90.000	359.771	12281.000	128.945	0.000	135.850	0.000	128.945	0.000	0.000	135.851	54.875	-0.503	MWD+IFR1+MS
27700.000	90.000	359.771	12281.000	129.707	0.000	136.679	0.000	129.707	0.000	0.000	136.680	54.954	-0.498	MWD+IFR1+MS
27800.000	90.000	359.771	12281.000	130.468	0.000	137.508	0.000	130.468	0.000	0.000	137.509	55.033	-0.494	MWD+IFR1+MS
27900.000	90.000	359.771	12281.000	131.230	0.000	138.338	0.000	131.230	0.000	0.000	138.339	55.112	-0.489	MWD+IFR1+MS
28000.000	90.000	359.771	12281.000	131.993	0.000	139.168	0.000	131.993	0.000	0.000	139.170	55.192	-0.484	MWD+IFR1+MS
28100.000	90.000	359.771	12281.000	132.755	0.000	140.000	0.000	132.755	0.000	0.000	140.001	55.273	-0.480	MWD+IFR1+MS
28200.000	90.000	359.771	12281.000	133.518	0.000	140.831	0.000	133.518	0.000	0.000	140.833	55.354	-0.476	MWD+IFR1+MS
28300.000	90.000	359.771	12281.000	134.281	0.000	141.664	0.000	134.281	0.000	0.000	141.665	55.435	-0.471	MWD+IFR1+MS
28400.000	90.000	359.771	12281.000	135.044	0.000	142.497	0.000	135.044	0.000	0.000	142.498	55.517	-0.467	MWD+IFR1+MS
28500.000	90.000	359.771	12281.000	135.808	0.000	143.330	0.000	135.808	0.000	0.000	143.331	55.599	-0.463	MWD+IFR1+MS
28600.000	90.000	359.771	12281.000	136.572	0.000	144.164	0.000	136.572	0.000	0.000	144.165	55.682	-0.459	MWD+IFR1+MS
28700.000	90.000	359.771	12281.000	137.336	0.000	144.999	0.000	137.336	0.000	0.000	145.000	55.765	-0.455	MWD+IFR1+MS
28800.000	90.000	359.771	12281.000	138.100	0.000	145.834	0.000	138.100	0.000	0.000	145.835	55.848	-0.452	MWD+IFR1+MS
28900.000	90.000	359.771	12281.000	138.865	0.000	146.670	0.000	138.865	0.000	0.000	146.671	55.932	-0.448	MWD+IFR1+MS
29000.000	90.000	359.771	12281.000	139.629	0.000	147.506	0.000	139.629	0.000	0.000	147.507	56.016	-0.444	MWD+IFR1+MS

29100.000	90.000	359.771	12281.000	140.394	0.000	148.343	0.000	140.394	0.000	0.000	148.344	56.101	-0.441	MWD+IFR1+MS
29187.264	90.000	359.771	12281.000	141.062	0.000	149.073	0.000	141.062	0.000	0.000	149.074	56.175	-0.438	MWD+IFR1+MS
29200.000	90.000	359.771	12281.000	141.159	0.000	149.179	0.000	141.159	0.000	0.000	149.180	56.186	-0.437	MWD+IFR1+MS
29287.265	90.000	359.771	12281.000	141.826	0.000	149.909	0.000	141.826	0.000	0.000	149.910	56.261	-0.434	MWD+IFR1+MS

Plan Targets

POKER LAKE UNIT 23 DTD 178H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 7	13189.28	440150.50	651484.10	8804.00	RECTANGLE
LTP 7	29187.26	456148.30	651420.20	8804.00	RECTANGLE
BHL 7	29287.26	456248.30	651419.90	8804.00	RECTANGLE

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
POKER LAKE UNIT 23 DTD - 178H
Projected TD: 29287' MD / 12281' TVD
SHL: 845' FSL & 518' FEL , Section 14, T24S, R30E
BHL: 230' FNL & 330' FEL , Section 2, T24S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	533'	Water
Top of Salt	850'	Water
Base of Salt	3874'	Water
Delaware	4083'	Water
Brushy Canyon	6311'	Water/Oil/Gas
Bone Spring	7965'	Water
1st Bone Spring Ss	8939'	Water/Oil/Gas
2nd Bone Spring Ss	9732'	Water/Oil/Gas
3rd Bone Spring Sh	10417'	Water/Oil/Gas
Wolfcamp	11294'	Water/Oil/Gas
Wolfcamp X	11324'	Water/Oil/Gas
Wolfcamp Y	11373'	Water/Oil/Gas
Wolfcamp A	11428'	Water/Oil/Gas
Wolfcamp B	11842'	Water/Oil/Gas
Wolfcamp D	12181'	Water/Oil/Gas
Target/Land Curve	12281'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

*** Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 825' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3974' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 11364' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 29287 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 11064 feet) per Potash regulations.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 825'	13.375	54.5	J-55	BTC	New	3.11	3.25	20.22
12.25	0' – 3974'	9.625	40	J-55	BTC	New	1.40	3.06	3.96
8.75	0' – 4074'	7.625	29.7	RY P-110	Flush Joint	New	1.69	2.81	1.65
8.75	4074' – 11364'	7.625	29.7	HC L-80	Flush Joint	New	1.23	2.82	1.88
6.75	0' – 11264'	5.5	23	RY P-110	Semi-Premium	New	1.21	1.91	1.68
6.75	11264' - 29287'	5.5	23	RY P-110	Semi-Flush	New	1.21	1.75	4.07

· Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

· XTO requests to not utilize centralizers in the curve and lateral

· 9.625 Collapse analyzed using 50% evacuation based on regional experience.

· 7.625 Collapse analyzed using 50% evacuation based on regional experience.

· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

· Wellhead will be installed by manufacturer's representatives.

· Manufacturer will monitor welding process to ensure appropriate temperature of seal.

· Operator will test the 7-5/8" casing per BLM Onshore Order 2

· Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 825'

Optional Lead: 540 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft³/sx, 10.13 gal/sx water)

Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3974'

Lead: 830 sxs Class C (mixed at 14.8 ppg, 2.06 ft³/sx, 10.13 gal/sx water)

Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 11364'

1st Stage

Optional Lead: 120 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: 3674

Tail: 530 sxs Class C (mixed at 14.8 ppg, 1.27 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6311

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage - bradenhead contingency

Tail: 130 sxs Class C (mixed at 14.8 ppg, 2.77 ft³/sx, 6.39 gal/sx water)

Top of Cement: 3674

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6311') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per wellhead provider procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 23 New Semi-Flush, RY P-110 casing to be set at +/- 29287'

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 11064 feet

Tail: 1090 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 12064 feet

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 10M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 5600 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be conducted to at least 50% of the rated working pressure. When nipping up on the 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 825'	17.5	FW/Native	8.1-8.6	35-40	NC
825' - 3974'	12.25	Brine	8.5-9	30-32	NC
3974' to 11364'	8.75	BDE/OBM or FW/Brine	9-9.5	30-32	NC
11364' to 29287'	6.75	OBM	13-13.5	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 10.0 ppg -10.5 ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing where necessary. Otherwise, gamma ray will be utilized while actively drilling.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 185 to 205 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 8302 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

APD ID 10400078498

WELL LOCATION AND ACREAGE DEDICATION PLAT

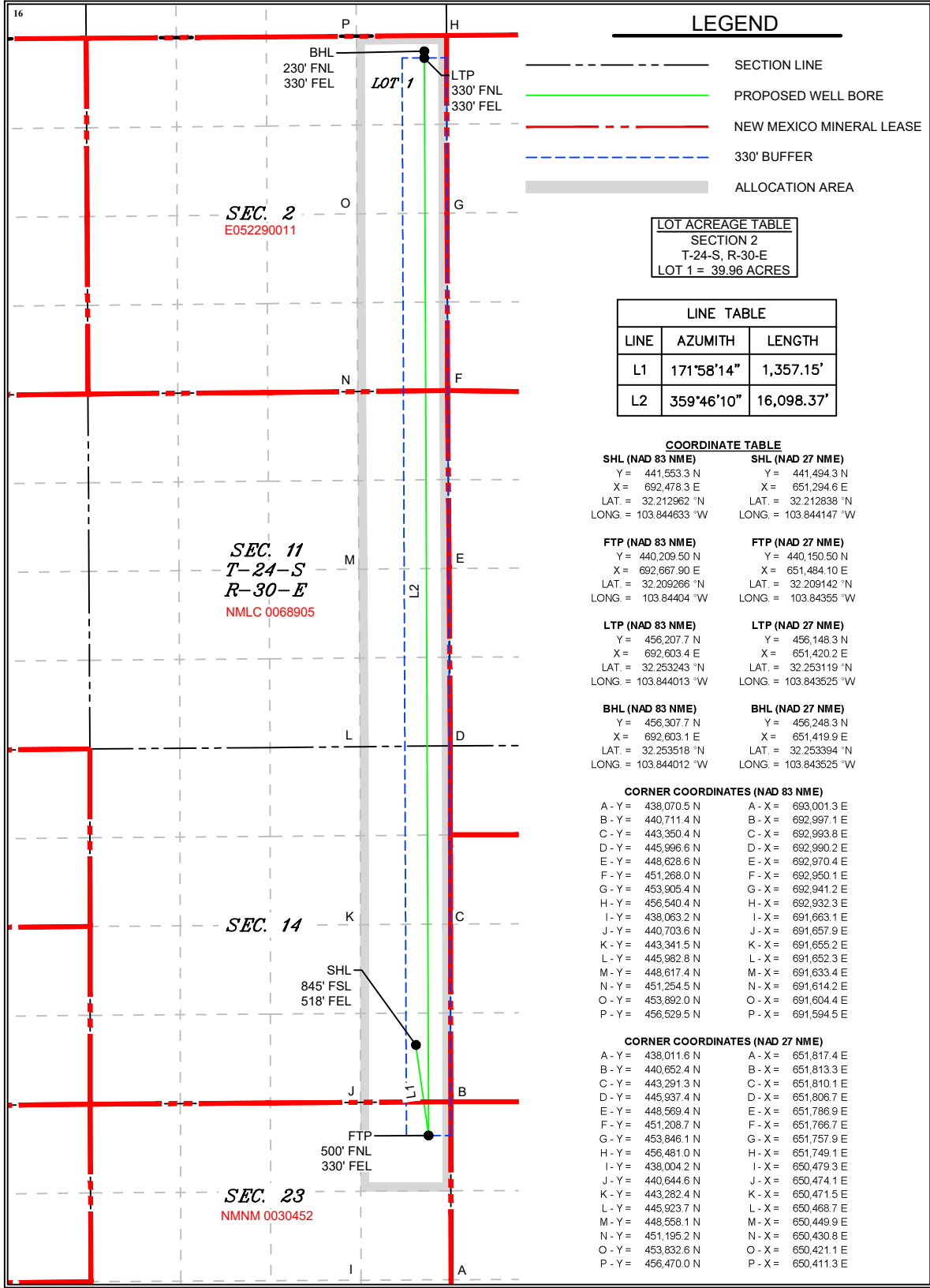
¹ API Number 30-015-	² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp (gas)
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 23 DTD	⁶ Well Number 178H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,445'

¹⁰ Surface Location									
UL or lot no. P	Section 14	Township 24S	Range 30E	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. 1	Section 2	Township 24S	Range 30E	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County EDDY

¹² Dedicated Acres 960	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



¹⁷ OPERATOR
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Rusty Klein 12-4-23
Signature Date

RUSTY KLEIN
Printed Name

ranell.klein@exxonmobil.com
E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

11-01-2023
Date of Survey

Signature and Seal of
Professional Surveyor:

[Signature]



MARK DILLON HARP 23786
Certificate Number

DB/AI/RP 618.013003.09-14

Intent ☒ As Drilled ☐

API # 30015		
Operator Name: XTO PERMIAN OPERATING, LLC	Property Name: Poker Lake Unit 23 DTD	Well Number 178H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL A	Section 23	Township 24S	Range 30E	Lot	Feet 500	From N/S North	Feet 330	From E/W East	County Eddy
Latitude 32.209266					Longitude 103.84404				NAD 83

Last Take Point (LTP)

UL 1	Section 2	Township 24S	Range 30E	Lot	Feet 330	From N/S North	Feet 330	From E/W East	County Eddy
Latitude 32.253243					Longitude 103.844013				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 298271

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 298271
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	12/29/2023